## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Currently Amended) A surface inspection system for work boards <u>passing through a plurality of manufacturing processes</u> comprising:
- a line sensor for one dimensionally imaging an elongated work board in lines perpendicular to the moving direction of the work board, comprising two types of image data sampling means, one for an odd-number sampling line and the other for an even-number sampling line;
- a velocity-measuring means for measuring in real time the <u>rotational velocity of a transferring roller for transferring moving velocity of the work board on each data sampling position of the line sensor;</u>
- a sampling control means for controlling the image data sampling of said line sensor in the direction of board movement and on the basis of the moving velocity of the work board measured by said velocity-measuring means; and
- an image-composing memory for forming a two-dimensional image of the work board by sequentially combining odd line data and even-line data from the line sensor;
- a detecting means for detecting entry and exit of the work board into and out of each manufacturing process;
- a time-measuring apparatus for measuring times when the entry and exit of the work board are detected by said detecting means; and
- an identifying means for identifying the work board based on a process number representing each manufacturing process, and on times of entry and exit of the work board into and out of the process measured by said time-measuring means.

## Claim 2 (Canceled)

3. (Original) The surface inspection system for work boards according to claim 1, which further comprises a controlling means to correct the image data on the basis of the degree of a slant of the work board.



4. (Currently Amended) The surface inspection system for work boards according to claim 1, which further comprises a transmitting means for assigning every work board its own a transmission channel for sequentially transmitting periodically varying images of the board on each manufacturing process, assembling said image data into a transmission packet and transmitting said transmission packet.

Claim 5 (Canceled)

Claim 6 (Canceled)

Claim 7 (Canceled)

Claim 8 (Canceled)

Claim 9 (Canceled)

Claim 10 (Canceled)

11. (Previously presented) A surface inspection system as in claim 3, wherein slant correction is accomplished by an affine transformation based on the angle of slant as determined by the following equation:

$$\theta = \cos -1 (A_0/A')$$

wherein  $\theta$  equals the angle of slant,  $A_0$  equals the width of the work board and A' equals the number of pixels.